

State of Tennessee
Sourcing Event 34101-11471
Tennessee Military Department
Tennessee Emergency Management Agency (TEMA)

Subject: Emergency Generators; Quarterly and Annual Preventative and Load Bank Testing
Maintenance/Inspection Repairs/Service

Contract Specifications and Special Requirements

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*** I. Scope:

A. Scope of Service:

To provide services that includes maintenance, preventative maintenance, inspection, and

repairs of emergency generators. Services to be rendered and performed in accordance with the requirements of the National Electric Code, and the recommended procedures of the manufacturer.

B. TEMA's Point of Contact:

William Smith
3041 Sidco Dr.
Nashville, Tennessee 37204
615-532-0430, William.j.smith@tn.gov

II. . Bidder/Contractor Requirements:

A. Contractor Qualifications:

Criteria for bidder/contractor qualifications are defined by the terms and conditions of the solicitation.

B. Contractor Requirements and Responsibilities:

1. Contractor shall within fifteen (15) calendar days of the effective date of contract agreement, meet with TEMA Point of Contact to discuss service requirements and specifications. Inspection and maintenance services will be scheduled during normal business hours (i.e., 8:00 AM to 4:30 PM) Monday through Friday in time zone where work is performed except for emergencies. The quarterly and annual inspections/services will be at a date and time mutually agreed on by the TEMA Point of Contact and the successful vendor.
2. Contractor shall be responsible for all repairs, adjustments, calibrations, troubleshooting, and diagnostic service required for satisfactory operation and overall equipment performance.
3. The contractor awarded this maintenance agreement is to have an established and qualified full time service staff with the ability to receive and dispatch service technicians upon request of the TEMA Point of Contact and/or an authorized representative of the Tennessee Military Department, TEMA.
4. The contractor will provide telephone and cell phone numbers of personnel to contact for "emergency" and "non-emergency" service calls. The use of an outside answering service and/or voice mail system (i.e., answering machine/recorder) is not acceptable to the state as a contact for "nonemergency" and/or "emergency" situations.
5. Contractor shall furnish a written report to the TEMA Point of Contact upon conclusion of each visit and specify whether the visit is a "non-emergency" or "emergency" service call (i.e., premium time, regular time), as defined in section III. All repairs and/or replacement parts must have prior approval of the TEMA Point of Contact prior to commencing and/ or Except where noted.

6. All visitations by service technicians shall be logged on site as to date and time (Le., time in and time out) by facility security personnel, TEMA Point of Contact and/or an authorized representative. It is required that all service technicians personally sign-in and sign-out to verify their presence and length of stay at the facility.
7. The contractor shall be responsible for furnishing all materials and supplies specified in the test schedules for the quarterly and annual inspections and testing equipment, labor, modifications and services needed to complete all testing inspections, and calibrations. Any item checked needing repair and or replacement and not listed as vendor supplied in the quarterly or annual inspections will require prior approval of the TEMA Point of Contact authorizing replace or repair of part.
8. The contractor shall furnish a completed written report to the TEMA Point of Contact, or designee, after each inspection. The report must be itemized and contain the following:
 - A. Description of work performed.
 - B. Labor hours (time in and time out).
 - C. List of parts used when applicable.
 - D. All findings which concern the state of or operation of equipment system under contract.
 - E. Any recommendations for repair or additional service.
 - F. The report must reference the purchase order number assigned to the service provided.
9. In performance of service, and in compliance with the specifications of this contract, the contractor shall place the highest priority on energy conservation and shall coordinate all activities with the TEMA Point of Contact, and/or representative staff for the most economical operation of building equipment, machinery and systems.
10. The contractor may determine the number of personnel to be utilized in the performance of services specified by this contract agreement; however, the state will consider only one (1) person as a "technician" unless prior approval is obtained from the TEMA Point of Contact. Invoices submitted shall reflect charges accordingly and at the base unit rate bid.
11. When requested, prior to use at an agency facility or on agency grounds, the contractor shall provide a material safety data sheet (MSDS) for substances or materials for which a MSDS is required.
12. Vendors shall have for their private use all tools and equipment considered necessary for the performance of the scope of services. Any use of additional equipment where there will be a charge to the state must have prior approval of the facility administrator.
13. The contractor must have trained personnel; trained to work on the equipment system(s) as described or as listed, and perform the services as requested. At the state's request the contractor may be required to furnish evidence of training. All work is to be performed by trained personnel.

14. Insurance requirements: Criteria for insurance and liability coverage requirement are defined by terms and conditions of the solicitation.

III. General Specifications and Special Requirements:

A. Definitions:

1. "Regular Time" -Refers to conditions whereby services required at times other than the regular scheduled quarterly and annual inspections. These conditions may exist during normal business hours of 8:00 A.M. to 4:30 P.M., Monday through Friday in time zone where work is performed, excluding holidays and charged at "regular time" rates.
2. "Premium Time" -Refers to conditions whereby services are required at times other than the regular scheduled service. Time Zone where work is performed. These conditions may exist during and/or after normal business hours of 4:31 P.M. to 7:59 A.M. Monday through Friday, including weekends and/or holidays and charged at "premium time" rates.

B. General Specifications / Requirements:

The omission of detailed specifications does not limit the quality of services to be provided and only the best commercial practices are acceptable. The contractor shall comply with the "National Electrical Code" guidelines and requirements and shall be regularly engaged in the business of providing the service(s) requested herein.

1. The inspection, servicing, and testing and/or repairs will be performed in accordance with the requirements of the National Electrical Code and any applicable state and local codes, and in accordance with the procedures recommended by the manufacturer of the equipment. This service is not limited to an inspection and testing only but will include maintenance, repairs, alterations and replacement of parts or authorized replacement
2. All manufacturers' warranties for replacement parts will be applicable and any instance where manufacturer's technical assistance is required, approval shall be obtained from the TEMA Point of Contact and all costs associated with same shall be borne by the contractor.
3. Any repairs to the systems herein referred to, outside of the "quarterly" or annual maintenance/inspections testing and/or repairs must be approved prior to performance of repairs by the TEMA Point of Contact. A written signed quote will be provided detailing work to be performed and will include all parts needed.
4. Bidders are encouraged to visit the job site to familiarize themselves with conditions of building, and systems and their component parts before submitting a bid.

5. All repairs are to be approved by the TEMA Point of Contact before starting the repairs. After the completion of repairs to the generator systems, the contractor and the TEMA Point of Contact will inspect the completed work performed by the contractor.
6. All scheduled work is to be performed between 8:00 A.M. and 4:30 P.M. Monday through Friday in time zone where work is performed. However and for any reason the TEMA Point of Contact and/or an authorized representative of same, may request a "non-failure" examination or service call made outside these hours. Additional charges will be paid per the hourly rates as bid for "premium time".
7. The contractor shall provide emergency service twenty four (24) hours per day, seven (7) days per week. The TEMA Point of Contact shall declare the status of the request as emergency or non-emergency. The contractor response times commence upon notification and will be as follows:
- A. "Non-Emergency" Situation will be required within one (1) working day.
 - B. "Emergency" Situation will require a four (4) hour on-site response time.
8. "Trip Charges

Trip charges are limited to a single charge per round trip or per given work order. Return trips due to incomplete work and/or services shall be limited to a single trip charge. Any job requiring more than two (2) working days may be subject to additional trip charges. The contractor may request approval for an additional trip charge from the TEMA Point of Contact, who will decide whether or not an additional trip charge is applicable.

NOTE: Trip charges do not apply to the annual and quarterly inspections.

9. Site Clean-up

During course of work the contractor shall maintain a clean work area. The contractor must clean a work area of any unsafe materials and/ or debris, and remove or secure all tools when the contractor leaves the work area unattended. The contractor shall clean the work area of all waste or debris generated by the contractor during the performance of a service call, leaving the work area clean at the end of each day. Waste or debris generated by the contractor will be removed from the work site, and disposed of properly, by the contractor in accordance with federal, state, and local regulations.

10. Contractor will visit installation once every 3 months (Le., quarterly inspection) on dates mutually determined and agreed on between the TEMA Point of Contact and the contractor, to inspect, service, test, and/or repair emergency generator systems and one (1) time per year for annual inspection as specified in this agreement. These periodic inspection/testing repair visits shall include, but not limited to the following:

*****Diesel Powered Units***** **

Annual Inspection ***

1. Fuel System:

- A. Change fuel filter elements
- B. Pump off water and sediments from main fuel tank
- C. Drain water and sediment from day tank
- D. General inspection of all components
- E. Check fuel pressure at cylinder head (if applicable)
- F. Check fuel level in main fuel tank
- G. Check operation of day tank
- H. Add sufficient fuel additives to inhibit bacterial growth to absorb condensation water in main fuel tank.
- I. Check and record fuel levels, notify POC if below 75 percent

2. Lubricating System:

- A. Change oil in engine
- B. Change oil filter
- C. Check and record engine oil pressure
- D. Check engine for oil leaks
- E. Leave customer make up oil one (1) Quart per engine cylinder

3. Cooling System:

- A. Check engine water pump
- B. Check all cooling system hoses
- C. Check and clean all louvers
- D. Clean external core of radiator
- E. Check coolant level
- F. Check and record freeze protection (add antifreeze if required)
- G. Add rust inhibitor to cooling system
- H. Check condition of fan belts
- I. Check for adequate fresh air to engine
- J. Check condition of fan hub
- K. Check operation of water jacket heater
- L. Check and record operating temperatures (verify that operating temperature is in the correct range)

4. Exhaust System:

- A. Check condition of mufflers, exhaust lines, supports/connectors
- B. Check condition of turbocharger (if applicable)
- C. Check exhaust for leaks

5. General:

- A. Check for unusual conditions: vibration, deterioration, leakage, high surface temperature and/or excessive noise

- B. Run generator under emergency conditions if possible. If not run generator under test conditions
- C. Record all readings and present to agency representative
- D. Leave control panel in automatic mode
- E. Notify agency of any additional services needed

6. Air Intake System:

- A. Check air inlet piping
- B. Check condition of air filter element (or oil bath)

*****Diesel Engines Units***** *** **Quarterly
Inspection ***

1. Fuel System:

- A. Drain water and sediment from fuel filters
- B. Perform general inspection of all components
- C. Check fuel pressure at cylinder head (if applicable)
- D. Check fuel level in day tank
- E. Check and record fuel levels, notify POC if below 75 percent

2. Lubricating System:

- A. Check oil level -fill to proper level
- B. Check and record engine oil pressure
- C. Check engine oil for leaks

3. Cooling System:

- A. Check all cooling system hoses
- B. Check coolant level
- C. Check freeze protection -add antifreeze (if required)
- D. Check condition of fan belts

4. Exhaust System:

- A. Check condition of exhaust system
- B. Check for exhaust leaks

5. Air Intake System:

- A. Check air inlet piping
- B. Check condition of air filter element (or oil bath)

6. Control System

- A. Check operation of all gauges and meters
- B. Check operation of all controls
- C. Check shutdown system

7. Engine Electrical Starting System:

- A. Clean batteries and cables
- B. Add distilled water to maintain proper electrolyte level
- C. Check operation of float charger
- D. Check and record battery voltage

8. Generator:

- A. Check main circuit breaker for operation (if applicable)

B. Check transfer switch for proper condition and operation

9. General:

- A. Check for unusual conditions: vibrations, deterioration, leakage, high surface temperature and/or noise
- B. Run generator under emergency conditions if possible, if not, run under test conditions
- C. Record all readings and present to agency representative
- D. Leave control panel in automatic mode
- E. Notify agency of any additional services needed

*****Gasoline Powered Units*****

Annual Inspection

1. Fuel System:

- A. General Inspection of all components
- B. Check fuel pressure at carburetor
- C. Check fuel level in main fuel tank
- D. Check and record fuel levels, notify POC if below 75 percent

2. Lubricating System:

- A. Check oil in engine
- B. Replace oil in filter and oil element
- C. Check and record engine oil pressure
- D. Check engine for oil leaks
- E. Leave four (4) quarts make up oil

3. Cooling System:

- A. Check engine water pump
- B. Check all cooling system hoses
- C. Check and clean all louvers
- D. Clean external core of radiator
- E. Check coolant level
- F. Check freeze protection (add antifreeze if required)
- G. Add rust inhibitor to coolant
- H. Check condition of fan belts
- I. Check for adequate fresh air to engine
- J. Check operation of water jacket heater
- K. Check for correct operating temperature

4. Exhaust System:

- A. Check condition of mufflers, exhaust lines, supports and connections
- B. Check for exhaust leaks

5. Air Intake System:

- A. Check air inlet restriction
- B. Check crankcase pressure

- C. Check exhaust restriction
 - D. Clean crankcase breather pads
 - E. Check all air system piping
 - F. Service oil bath air cleaner
6. Control System:
- A. Check operation of all gauges and meters
 - B. Clean control cabinet
 - C. Check operation of all controls
7. Engine Electrical Starting System:
- A. Check condition of batteries
 - B. Clean batteries and cables
 - C. Add distilled water to maintain proper electrolyte level
 - D. Check operation of float charger
 - E. Lubricate starter motor
 - F. Replace spark plugs
 - G. Replace ignition points, condenser and rotor
8. Generator:
- A. Blowout with low pressure air
 - B. Check condition of bearings
 - C. Check main circuit breaker
 - D. Check cables from generator to transfer switch
9. General:
- A. Check for unusual conditions: vibration, deterioration, leakage, high surface temperature, and/ or noise.
 - B. Run generator under emergency conditions, if possible. If not, Run under test conditions.
 - C. Record all readings and present to agency representative.
 - D. leave control panel in automatic mode.
 - E. Notify agency of any additional services needed.

*****Gasoline Powered Units*****

Quarterly Inspection

1. Fuel System:
- A. General inspection of all components
 - B. Check fuel pressure at carburetor
 - C. Check fuel level in main tank
 - D. Check and record fuel levels, notify POC if below 75 percent
2. Lubricating System:
- A. Check oil level -fill to proper level
 - B. Check and record engine oil pressure
 - C. Check engine for oil leaks
 - D. leave four (4) quarts make up oil

3. Cooling System:
 - A. Check all cooling system hoses
 - B. Check coolant level
 - C. Check freeze protection -Add antifreeze if necessary
 - D. Check condition of fan belts
 - E. Check operation of water jacket heater
 - F. Check for correct operating temperature
4. Exhaust System:
 - A. Check condition of exhaust system
 - B. Check for exhaust leaks
5. Air Intake System:
 - A. Check air inlet piping
 - B. Check condition of air filter
6. Control System:
 - A. Check operation of all gauges and meters
 - B. Check operation of all controls
 - C. Check shut down system
7. Engine Electrical Starting System:
 - A. Clean batteries and cables
 - B. Add distilled water to maintain proper electrolyte level
 - C. Check operation of float charger
 - D. Check battery charger
8. Generator:
 - A. Check main circuit breaker for proper operation
9. General:
 - A. Check for unusual conditions; vibration, deterioration, leakage, high surface temperature and/ or noise
 - B. Run generator under emergency conditions, if possible. If not, run under test conditions
 - C. Record all readings and present to agency representative
 - D. Notify agency of any additional services needed

***** LP Gas Powered Units ***** *** Annual
Inspection ***

1. Fuel System:
 - A. General inspection of all components
 - B. Check and record fuel levels, notify POC if below 75 percent
2. Lubricating System:
 - A. Change oil in system
 - B. Replace oil in filter and element
 - C. Check engine for leaks

- D. leave one (1) quart make up oil
- 3. Exhaust System:
 - A. Check condition of mufflers, exhaust lines, supports/ connections
 - B. Check for exhaust leaks
- 4. Air Intake System:
 - A. Check air inlet restrictions
 - B. Check condition of dry type air cleaner element/ elements and Replace if necessary
- 5. Control System:
 - A. Check operation of all meters and gauges
 - B. Clean control cabinet
 - C. Check operation of all controls
 - D. Check shut down system
- 6. Engine Electrical Starting System:
 - A. Check condition of batteries
 - B. Clean batteries and cables
 - C. Add distilled water to maintain proper electrolyte level
 - D. Check operation of float charger
 - E. Check battery voltage (1.42 volts per cell)
- 7. Generator:
 - A. Check condition of bearing
 - B. Check main circuit breaker for proper operation
 - C. Check cables from generator to transfer switch
- 8. General:
 - A. Check for unusual conditions: vibration, deterioration, leakage, high surface temperature and/ or noise
 - B. Run generator under emergency conditions, if possible. If not, Run under test conditions
 - C. Record all readings and present to agency representative
 - D. leave control panel in automatic mode
 - E. Notify agency of additional services required

***** LP Gas Powered Units***** *** Quarterly Inspection ***

- 1. Fuel System:
 - A. General Inspection of all components
 - B. Check and record fuel levels, notify POC if below 75 percent
- 2. Lubricating System
 - A. Check oil level-fill to proper level
 - B. Check engine for oil leaks
- 3. Exhaust System:
 - A. Check condition of exhaust system
 - B. Check for exhaust leaks

4. Air Intake System:
 - A. Check air inlet piping
 - B. Check condition of air filter element elements
5. Control System:
 - A. Check operation of all gauges and meters
 - B. Check operation of all controls
 - C. Check shut down system
6. Engine Electrical Starting System:
 - A. Clean batteries and cables
 - B. Add distilled water to maintain proper electrolyte level
 - C. Check operation of float charger
 - D. Check battery voltage
7. Generator:
 - A. Check main circuit breaker for proper operation
8. General:
 - A. Check for unusual conditions: vibration, deterioration, leakage, high surface temperature and or noise
 - B. Run generator under emergency conditions, if possible. If not, Run under test conditions
 - C. Record all readings and present to agency representative
 - D. Leave control panel in automatic mode
 - E. Notify agency of any additional service work required

IV. Invoice Information:

A. Invoice:

Invoices are to be itemized by location and cost center. All supporting documentation shall accompany each invoice including, but not limited to, discount parts cost, time and attendance records, etc.

1. Supporting documentation where applicable shall accompany each invoice.
2. Lunch and breaks are to be excluded from rate charges for reimbursement. All invoices shall correspond with the sign in/sign out register by hours listed.

Note: Sign in/sign out registers will be furnished by the State.

3. A service voucher and/or job ticket shall be left at job site documenting man hours, supplies,

materials, and equipment used. This service voucher/job ticket shall be required as supporting documentation as to service performed and to assist in expediting payment upon receipt of an invoice.

B. Repair Parts:

All parts, materials, supplies and equipment, excluding parts and expendables included in quarterly and annual inspections, will be billed at vendor/contractor's cost, minus any applicable sales or use tax pursuant to Tennessee Code Annotated, Section 67-6-209, plus fifteen percent (+15%). Reference Standard Term & Condition titled "Taxes".

The vendor shall submit as backup documentation a copy of the original purchase invoice(s) as proof of cost for parts, materials, supplies and equipment. This backup documentation must accompany the invoice in order for the agency to process payment. If the vendor/contractor cannot produce a copy of the original purchase invoice as proof of cost, the state may verify current market value and if necessary, adjust the invoice to reflect fair market price.

C. Parts Requirements

All parts, materials, and supplies used in the performance of contract work must be new. Manufacturer parts, manufacturer-approved parts, or equal, as per the brand (s) listed, will be used to maintain the integrity of the equipment/system(s) under contract. Parts, materials, supplies and equipment will be replaced when deemed to be in the best interest of the state. Furthermore, the state reserves the right to utilize the contractor's services to install said parts, materials, supplies and equipment at the hourly rate as bid. Repair parts shall be equal to quality and size and shall not void any warranties.

D. Warranty Period/Coverage

Services requiring the contractor to return to the job site due to equipment/system(s) failure with reference to services previously provided by the contractor will be at no charge to the agency. The contractor shall absorb all cost incurred for replacement, repair, or corrections made to agency equipment/system(s) due the following:

1. Faulty equipment or parts installed by the contractor.
2. Equipment/system(s) failure due to the contractors' poor workmanship.

The agency shall be given manufacturer warranty agreements for equipment, parts and materials used by the contractor on the equipment/system(s) under contract, when ownership is assumed. For equipment, parts, or materials that are under warranty of the manufacturer, and owned by the state, said warranty will be honored. The contractor shall warranty labor and workmanship one (1) year against defects.

Load bank testing:

Load bank testing at the agency request to be performed by the successful vendor will require the vendor to perform a two (2) hour load bank test with the use of a portable load bank to be furnished by the Contractor. The bidder shall include all costs to perform the load test for each generator to include all labor and trip charges. The Contractor shall not perform load bank testing prior to receiving a Purchase Order authorizing the work. Load Bank Testing will be performed at least every TWO years on even years.